

Claims:

1. Rzeppa joint that has a drive side end (2) and a power take-off side end (3), having

- an inner hub (4), which has an inner hub axis (9) and an outer surface in which first running grooves (12) and second running grooves (13) are disposed, distributed alternately about the inner hub axis (9), whereby the first inner running grooves (12) run proceeding from the drive side end (2), in the direction of the power take-off side end (3), and their track base (14) approaches the inner hub axis (9) in doing so, and whereby the second inner running grooves (13) run from the power take-off side end (3), proceeding in the direction of the drive side end (2), and their track base (15) approaches the inner hub axis (9) in doing so,
- an outer hub (7), which has an outer hub axis and an inner surface in which first running grooves (18) and second running grooves (19) are disposed, distributed alternately about the outer hub axis, whereby the first inner running grooves (12) lie opposite first outer running grooves (18),

and the second inner running grooves (13) lie opposite second outer running grooves (19), forming a pair with these, in each instance, whereby the first outer running grooves (18) run proceeding from the drive side end (2), in the direction of the power take-off side end (3), and their track base (20) moves away from the outer hub axis in doing so, and whereby the second outer running grooves (19) run from the power take-off side end (3), proceeding in the direction of the drive side end (2), and their track base (21) moves away from the outer hub axis (16) in doing so,

- a ring-shaped cage (5) that is disposed between the inner hub (4) and the outer hub (7) and has radial windows (8), corresponding to the number of pairs of running grooves (12, 18; 13, 19), in which balls (6) that engage in the running grooves (12, 13, 18, 19) are guided,

characterized in that the inner hub (4) comprises at least two elements (10a, 10b, 11a, 11b) that are connected with one another, which lie essentially one behind the other on the inner hub axis (9), and of which a first element (10a, 10b) has the first inner running grooves (12) and a second element (11a, 11b) has the second inner running grooves (13).

2. Rzeppa joint according to claim 1, **characterized in that** the two elements (10a, 10b, 11a, 11b) each have projections and recesses that engage like claws in one another, in such a manner that they rest against one another with a positive lock, in the tangential direction.

3. Rzeppa joint according to claim 1 or 2, **characterized in that** the two elements (10a, 10b, 11a, 11b) are releasably connected with one another by means of a screw connection (16, 24).

4. Rzeppa joint according to one of claims 1 to 3, **characterized in that** the two elements (10a, 10b, 11a, 11b) of the inner hub (4) are solid formed parts that are machined essentially without cutting.

5. Rzeppa joint according to one of claims 1 to 4, **characterized in that** one of the elements (10a, 10b, 11a, 11b) forms the end of a shaft (22) or a journal.

6. Rzeppa joint according to one of claims 1 to 4, **characterized in that** one of the elements (10a, 10b, 11a, 11b)

is formed in one piece with a sleeve (17) that has an inner profiling.

7. Rzeppa joint according to one of claims 1 to 6,
characterized in that the number of running grooves (12, 13, 18, 19) in the outer hub (7) and the inner hub (4) is a whole-number multiple of four.